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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/781,239	02/13/2001	Keishi Sugimoto	56937-024	8013

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EXAMINER

BLOUNT, STEVEN

ART UNIT PAPER NUMBER

2616

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 09/781,239	<b>Applicant(s)</b> SUGIMOTO ET AL.	
	<b>Examiner</b> Steven Blount	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2, 6 - 7, 9, 13 - 15, 17, 20 - 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2, 6 - 7, 9, 13 - 15, 17, 20 - 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 2, 6 – 7, 9, 13 – 15, 17, and 20 – 21 are rejected under 35 U.S.C. 112 second paragraph for failing to particularly point out and distinctly claim the subject matter which the applicant regards as their invention.

In claim 2, an apparatus claim is presented which uses the language “configured such that”. While the use of this language is not per-se indefinite, since no structure is recited in the claim, this use is indefinite as an infinite variety of apparatus which perform the function would read on the claim. Further, in claim 6, “as said unnecessary-packet areas corresponding to the unnecessary PID’s” is indefinite in the use of its language. In claim 9, lines 2+, “whether identical PID’s exist on the two TS sides of the packets is indefinite”. In claim 14, lines 2+, “said overwritten-side TS” lacks antecedent basis. In claim 17, lines 4+, “to thereby specifying output” is indefinite, as is “one of said demodulator sections, which is different from said one of said demodulator sections”. Also, “which will be referred to as a CTS” is indefinite. In claims 20 and 21, “the unnecessary-packet areas” lack antecedent basis.

Applicant is encouraged to examine the claims for similar problems such as these.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 2, 6, and 19 are rejected under 35 U.S.C. 102(e) as being unpatentable over Robinett et al. (US Pat No. 6,351,474.)

Regarding claim 2, Robinett et al. disclosed a digital broadcast receiving apparatus (Fig. 2) configured such that overwriting of packets corresponding to necessary PIDs in a second TS is performed to unnecessary-packet areas corresponding to unnecessary PIDs in a first TS (the first TS as claimed could be interpreted as TS3 in the reference and the second TS as claimed could be interpreted as TS1 or TS2 in the reference. Robinett et al. teach the packets corresponding to PIDs, which could be necessary because it used under the purpose of extraction, decoding, etc...TS 3 is for TS1 and TS2 to remultiplexed; therefore, it could be empty stream for types of transpond packets to be inserted.

In column 36 lines 1+, it is stated that "overwriting the prescrambling data of the transport packet"; wherein unnecessary packet areas are overwritten by necessary packets. It is noted that the use of the PID is discussed in col 35 lines 64+.

Regarding claim 6, Robinett et al. teach when packets to be multiplexed the overwriting, the packets on at least one of the TS sides are rewritten to make the packets to be different from one another, and PIDS of packets on the TS side where packets are added through the overwriting are rewritten. (Robinett et al. teach either TS1 or TS2 need to be rewritten to make packet distinct from one another. See col 20, lines 34-51.), and also teach unnecessary-packet areas corresponding to the

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unnecessary PIDs, NuLL-packet areas are given priority (Robinett et al. teach null transport packets are considered as must be accepted because of optimization of the bandwidth concern. Thus, the null packet would be considered as higher priority. See col 5, lines 51-54, col 43, lines 11-27). Regarding claims 16 and 19, Robinett et al. teach the plurality of Tss being selectable from (a) a TS including viewing-desired broadcast program data, (b) a TS including broadcast-program-table related data, (c) a TS including downloadable data, (d) a TS including image-recording-desired broadcast program data, and (e) Tss including other broadcast program data; and packets in the plurality of selected TSs are multiplexed (See col 33-34, lines 15-6 and col 47, lines 47-54.) and apparatuses arbitrarily selected from (a) an image-playback apparatus, (b) an audio-recording apparatus, and (c) a digital-image recording apparatus (See col 13, lines 8-24.)

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7, 9, 13, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 6,351,474 to Robinett et al.

Regarding claim 7, Robinett et al. teach a digital broadcast receiving apparatus for detecting unnecessary packet areas (null packet) corresponding to unnecessary PIDS in first TS that is input, extracting packets corresponding to necessary PIDs in a

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second TS; and overwriting packets extracted to null packet area in the TS (Robinett et al. teach to find the presence of null packet exist and replaced those with other to be remultiplexed transport packet data, which is necessary packet. See col 40, lines 1-57.)

Robinett et al. does not specifically unnecessary-packet detecting means, necessary-packet extracting means and packet-overwriting means recited in the claim', however, Robinett et al. teach the method and system to perform the Limitations and it has to have means to perform those limitation. In addition, Robinett et al. teach the processor and memory to perform the extracting and allocating the packets. (See col 40, lines 1-57) Therefore, it would have been obvious to one who has ordinary skill in the art at the time the invention was made to have means to perform extracting and overwriting functions because it has to have some functions in order to perform Robinett et al.'s method. Regarding claims 9 and 13, Robinett et al. teach determine if TS1 and TS2 have the identical PIDs and convert one of TS with different PIDS to ensure uniqueness when remultiplexing (See col 20, lines 20-51.) The PID set is according to the user specification (See col 29-30, lines 30-18, and table 1.) Robinett et al. does not specifically teach identical-pID determining means and PID-converting means. The same rationale and basis as applied to claim 7 are applied.

Regarding claim 15, Robinett et al. when Null packet area is available, the slot is used for the transmitting data; however, when burst state occurs, overwriting would find the vacant transpond packet time slot in order to maintain some data transmission rate to the receiver (See col 5, lines 47-49, col 40, lines 1-10, col 42, lines 45-65, col 43, lines 1 1-27.)

5. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saeki Hiroaki (Japanese Pub No. 1 1-122556.), in view of Robinett et al. (US Pat No. 6,351,474.)

Regarding claim 17, Saeki teach a digital broadcast receiving apparatus comprising: tuners for receiving modulated waves of digital broadcast waves; a plurality of groups of demodulator sections for demodulating signals output from said tuners to thereby output TSs; an input section for selecting a plurality of desired TSS to thereby specifying output destinations (Saeki teach tuners 21, 24, and 27 to received modulated waves and from demodulating signals to TSs, and further specified the audio or video signal as destination, such as 35 and 36. See Fig. 2 and Detail Description.) Saeki does not specifically teach extracting one necessary packet and overwrite to the unnecessary packets area onto the different TSs. Robinnett et al. teach those as described in the claim 2 and 5. Therefore, it would have been obvious to one who has ordinary skill in the art to have overwriting function in the digital broadcast receiving apparatus because it would make sure the uniqueness of PIDs for the decoding purpose.

7. Claims 14 and 20 – 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to include the limitations of the base claim and any intervening claims, and to overcome any 112 second paragraph problems.

8. Applicants arguments have been considered but are not persuasive.

Applicant argues that, with respect to claim 2, Robinett et al does not teach “rewriting” – apparently applicant meant to say “overwriting” (as claim 2 does not recite “rewriting”).

As noted in the rejection, overwriting is taught in col 36 lines 1+.

Applicant makes a similar argument on page 4, in paragraph 4. Again, the examiner notes that overwriting is taught in Robinett et al.

The examiner notes that with respect to Hiroaki, adjacency of the packets (see page 4 third paragraph) is not claimed. Also, and again, packet overwriting is taught in Robinett et al.

Applicants remarks with respect to claims 20 – 21 are moot as these claims are now allowed over the art of record.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Blount whose telephone number is 571-272-3071. The examiner can normally be reached on M-F 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Ms. Doris To, can be reached on 571-272-7269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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7/31/06